

Testimony Before the Senate Energy and Technology Committee

April 28, 2016

Net Metering - It Saves Money, Creates Jobs and Drives Economic Development

The Great Lakes Renewable Energy Association (GLREA), a trade association of 150 Michigan companies and energy advocates that install renewable energy systems for homeowners, farmers and private sector business, is opposed to the language in Senate Bill 438 that would fundamentally change net metering. It is our profound concern that this proposed change would undercut the growing solar energy sector in Michigan and would cause many solar businesses to shut down or cut back their activities.

Great Lakes Renewable Energy Association has been operating for over 24 years. We support our business members in the expanding renewable energy sector. Our signature event is the Michigan Renewable Energy Fair that takes place once a year, where solar, wind and biomass businesses come together and interact with members of the public. This year the Fair is taking place on June 24 and 25 at the Ingham County Fair Grounds in Mason. We would encourage you to attend so you can meet our members and have an opportunity to talk to renewable energy businesses about the energy policy that is needed in Michigan.

For homeowners and business, high electrical energy costs make it very difficult for business to compete, hard for farmers to thrive and difficult for homeowners to make ends meet. Michigan has the highest cost of electricity in the Upper Midwest as compared to Ohio, Indiana and Illinois.¹

As a result homeowners, farmers and business of all three classes - small, commercial and industrial - are trying to gain control and manage their energy expenditures. They are doing this by installing their own energy systems so they can generate their own energy at a lower cost. This expansion of solar is creating countless number of new jobs and is driving economic development. One example of this is that Suniva, a solar panel manufacturer from Atlanta, Georgia has opened a new manufacturing plant in Saginaw, creating new jobs and economic growth.

¹ US Energy Info Administration Table 5.6.A. <https://www.eia.gov/electricity/monthly/pdf/epm.pdf>

The current net metering program allows for people and business to upload excess electrical energy that they generate to the grid in any given month and receive a credit

from the utility at the retail rate of about 15 cents. And when the homeowner, farmer or business solar system is not producing enough energy in a cloudy month, then they can draw upon this credit.

The current energy policy in Michigan provides the option and the freedom of homeowners, farmers and business to choose to invest in a solar energy system. Net metering simply allows people to connect to the electric grid to help supply energy to other utility customers and be able to draw down energy when they need to.

Utilities benefit from this because distributive energy provides clean electricity to the grid that can be sold to other consumers and it reduces the need and saves money for utilities from having to bring on line the most expensive and usually the dirtiest power plants to supply power on peak demand months in July and August, when solar is the most productive.

SB 438 would change this net metering policy radically so that for all intensive purposes, it eliminates the option, the choice, the freedom for homeowners, farmers, small, medium and large commercial business from producing their own energy. The only class of customers that this bill explicitly says has this option, is very large 'industrial' business (Section 185, p. 80).

SB 438 changes net metering so that all distributive generation is on a 'buy-all, sell-all' basis where the energy the farmer, homeowner or business generates, with a solar system that they have paid for, would be required to be sold to the utility at the (essentially) wholesale price (called the Variable Power Supply Portion of the Retail Rate) of electricity at around 4 cents per kWh (kilowatt-hour) and then they have to buy back all their power at the retail rate of 15 cents per kWh.

SB 438 does this by defining the amount of power a homeowner, farmer or business uses as the "Imputed Customer Usage" which consists of power generated by the customer solar system and whatever extra power (net) they have to purchase normally from the utility. (Section 7 (B), p. 10). A customer then has to pay full retail rate (15 cents) for all this

power and they only get a credit (Variable Power Supply Portion) of about 4 cents for the power they produce themselves. (Section 177 (3), (4), p. 77).

This means that the farmer, homeowner or small business is not even allowed to use the energy they produced for their own needs, without being charged for it. They are being forced to sell their electricity to the utility. And farmers, homeowners and business are being forced to pay for the "fixed generation costs and transmission costs" of power the customer generates and uses on site, even though the customer's power is not distributed anywhere (Section 13 (D) p. 17).

What SB 438 is doing, is legalizing a *taking* by a state sponsored monopoly. But instead of government *taking* private property for public use and paying 'just compensation' to the property's former owners, SB 438 is letting a utility '*take*' the private generation of energy, a form of private property and paying a minimal amount in return.

Are we next going to pass a law that gives big grocery store chains the *legal authority* to require all homeowners and farmers to sell the tomatoes they grow at their cost, to them at 4 cents per bushel, rather than allowing homeowners the option of consuming them themselves (at no cost)? Or better yet, forcing farmers or homeowners to buy back their own tomatoes at 15 cents per bushel?

SB 438 would seriously undermine the freedom and ability of business and homeowners to choose to install a renewable energy system because the net metering changes would cripple the financial rationale for installing solar. The end result of this bill would be to put out of business countless solar and wind businesses across Michigan, eliminate competitive pressure on the utilities and allow them to maintain their monopoly on energy generation.

Utilities argue that under the current net metering law, solar and wind users are being subsidized and are using the grid without paying for it. But utilities offer no specific data to support this claim.

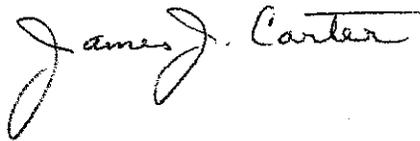
Homeowners, farmers and business that use solar are willing to pay their fair share to support the grid but they want to know what the true cost is. Rather than rely on utility rhetoric, the Great Lakes Renewable Energy Association would recommend that the Legislature keep net metering as it currently is and require the Public Service Commission to conduct a 'value of solar' analysis, like other states have done, to find out what the true

value of solar is and what the proper amount of compensation should be to maintain the electric grid and then report back to this legislative body for further deliberations.

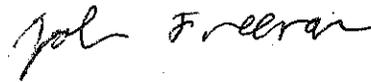
In conclusion, Section 1 of SB 438 states that the purpose of this Act is to "promote the development and use of clean and renewable energy resources" (subsection 2, p. 2), "encourage private sector investment in renewable energy" (subsection 2(c), p. 3) and have "as a goal 30% of this state's electric needs be met through a combination of energy waste reduction and renewable energy by 2025" (subsection 3, p. 3). And yet the proposed changes to net metering would completely undercut this effort.

For these reasons we would encourage Committee Members not to support this bill as currently written.

Thank you very much for this opportunity to speak.



James Carter
President



John Freeman
Board Member

Impact of SB 438 on Home Solar Economics

- In 2015 a homeowner purchases 5,923 kWh of electricity from a utility for a total yearly cost of \$904.87 or \$905.
- This family would need a solar system that produces 6,000 kWh to match their yearly consumption needs. They would therefore need a 4,545-watt size system consisting of 16 panels of 285W.¹
- The cost to install the system would be about \$3/watt so $4,545 \times 3 = \$13,635$.
- But you then subtract 30% of the cost for the Federal Investment Tax Credit so $.30 \times 13,636 = \$4,090$. The real cost is therefore $\$13,636 - \$4,090 = \$9,546$.
- At \$905 savings per year it will take **10.56 years** to pay for the system. $\$9,546/905 = 10.56$ years.
- Under SB 438 'Buy-all Sell-all' scheme, I would have to sell the 6,000 kWh to the utility and receive a credit at 4 cents per kWh which adds up to \$240 for the year. But then I have to buy back all my power that I need at 15 cents per kWh so the cost is what I pay now - \$905. With a solar system I would therefore pay the difference or \$665.
- At a \$240 per year savings it will take $9546/240 = 39.78$ years to pay off the system.

¹ The rule of thumb is that each watt will produce 1.32 kWh over the course of a year. So divide 6,000 by 1.32 = 4,545 watts. And then divide 4,545 by 285 and you get 15.95 or 16 panels.